

SYNONYMIA AGRILINARUM (COLEOPTERA, BUPRESTIDAE)¹

1. *Lius*

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Examination of type material of the subfamily Agrilinae of the Buprestidae in the possession of the British Museum (Natural History) and the U. S. National Museum has revealed a number of nomenclatural changes among the species treated by Waterhouse, Fisher and Kerremans. Examination of these types is part of a general review of the genus *Lius* and the rest of the subfamily Agrilinae of the Buprestidae in preparation for a taxonomic revision of the subfamily and examination of its ecology and distribution in Central America. A complete revision of *Lius*, including a key and descriptions of new species is planned.

At present the genus *Lius* includes about 110 named species (Blackwelder, 1944), of which 25 named species and varieties occur in Central America and Panama; these numbers incorporate the transfers to the genus and synonymies presented in this paper, but do not include undescribed forms. The distribution of the genus appears to be centered in the Amazon basin. The species are leaf-miners, in members of several families of plants (unpubl.; G. B. Vogt, personal comm.). The species are discussed in alphabetical order.

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Lius aeneus Kerremans, 1896: 330. Kerremans described this species from two specimens, both now in the British Museum. One is labeled "Valencia/Simon" and is a male; the other, "Mexique/Manuf. Tabacs." and is a female. The two specimens belong to different species; because the original description fits the Venezuelan specimen more closely, it is hereby designated the unique Lectotype. No material from Central America appears to be referable to *aeneus* as restricted here.

Lius amabilis Kerremans, 1896: 329. This species was described from specimens found in refuse from tobacco warehouses. Blackwelder (1944) follows Fisher (1922) in questioning the locality cited by Kerremans as the geographic origin of the tobacco. Other of Kerremans' species of the same origin, however, can consistently be shown to have originated from Mexico, so that Fisher's doubts seem to be unconfirmed. Two specimens in Kerremans' collection carry the labels "Mexique/Manuf. Tabacs" and "amabilis/Kerr./Type". Both are females and one has been designated as Lectotype.

Lius ares Saunders, 1876: 49. This species was described from material from Brazil. Comparison of Panamanian and Central American specimens referred to this species with the type of *ares* in the British Museum shows that this species does not occur in Central America. The material cited by Waterhouse as this species appears to represent an undescribed form.

Lius dissimilis Waterhouse, 1889: 135. The type in the British Museum is unique.

Lius parvulus Waterhouse, 1889: 136. A total of 18 specimens in the British Museum can be considered as type material. A card bearing two females carries the label "Bugaba, 800-1500 ft./Champion" and a second, handwritten label "*Lius/parvulus/*(Type) Waterh."; the right-hand specimen of these two is here designated as the Lectotype. Sixteen other specimens on 11 pins bear the labels "Bugaba, Panama/Champion." and "V. de Chiriqui, 2-300 ft./Champion." and are considered, with the other female, as paratypes.

Lius variabilis Waterhouse, 1889: 136. A total of 10 specimens in the British Museum can be considered as type material. A card bearing two specimens carries the label "S. Geronimo/Guatemala/Champion" and a second, handwritten label "*Lius/variabilis/*(Type) Waterh." The left-hand specimen is a male and is designated as the Lectotype. A female bearing the label "S. Geronimo, 3000 ft./Champion." is designated as a Lecto-allotype. Other specimens bearing these labels and those of "Chiacaman, Vera Paz./Champion." and "San Joaquin, Vera Paz./Champion." are considered to be paratypes.

In addition to four of the above species treated as *Lius*, Waterhouse (1889) named seven other species of *Lius* under the generic name *Leiopleura*. He expresses doubt about the generic position of these (and one other species which is considered by me to be a true *Leiopleura*; p. 160), but does not say why he did not place them with *Lius*. These are all transferred here to *Lius*, as follows (all specimens are in the British Museum):

Lius difficilis (Waterhouse), Basionym: *Leiopleura difficilis* Waterhouse, 1889: 161. The type is unique.

Lius inconspicuus (Waterhouse), Basionym: *Leiopleura inconspicua* Waterhouse, 1889: 162. There are two specimens, both females, each with the label "Belize/Blancaneaux." One of them bears the label, partially handwritten, "*Leiopleura/inconspicua/*(Type) Waterh." and is designated as the Lectotype.

Lius jubilans (Waterhouse), Basionym: *Leiopleura jubilans* Waterhouse, 1889: 163. The type is unique.

Lius longulus (Waterhouse), Basionym: *Leiopleura longula* Waterhouse, 1889: 162. Synonym: *Lius timidus* Kerremans, 1900: 349 (New Synonymy). Two specimens can be considered the type of *Leiopleura longula*. One bears the labels "Cordova/Mexico./

Salle Coll.", "735", and, partly handwritten, "*Leiopleura/longula/(Type) Waterh.*", and is here designated as the Lectotype. A second specimen bears the label "Mexico./Salle Coll./735" and is considered to be a paratype. The type of *Lius timidus* Kerremans is a unique female. It does not differ significantly from the type material of *Leiopleura longula*.

Lius placidus (Waterhouse) Basionym: *Leiopleura placida* Waterhouse, 1889: 163. This type is unique.

Lius cuneiformis Fisher, 1922: 58. Synonym: *Leiopleura parvula* Waterhouse, 1889: 161. The name *Lius parvulus* is preoccupied by the species discussed above, but Fisher's name is available for this species. Two specimens qualify as types of "*Leiopleura parvula* Wat." and both bear the label "David./Panama./Champion." One of them, a female, bears the additional handwritten label (*Leiopleura/parvula/(Type) Water.*) and is designated as the Lectotype. The second specimen is a male and is designated a Lectotype.

Lius waterhousei Hespeneheide, New Name for *Leiopleura polita* Waterhouse, 1889: 162. The name *Lius politus* is preoccupied by a Brazilian species described by Saunders in 1876. The type of *Leiopleura polita* Waterhouse is unique.

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LITERATURE CITED

- BLACKWELDER, R. E. 1944. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. U. S. Nat. Mus. Bull. 185 [2]: 189-340.
- FISHER, W. S. 1922. The leaf and twig mining buprestid beetles of Mexico and Central America. Proc. U. S. Nat. Mus. 62 [8]: 1-95.
- KERREMANS, C. 1896. Trachydes nouveaux. Ann. Soc. Ent. Belgique 43: 306-333.
- _____. 1900. Buprestides nouveaux et remarques synonymiques. Ann. Soc. Ent. Belgique 44: 292-351.
- SAUNDERS, E. 1876. Descriptions of some new species of Buprestidae belonging to the genus *Lius*, H. Deyrolle. Ent. Monthl. Mag. 13: 48-51.
- WATERHOUSE, C. O. 1889. Buprestidae. Biol. Cent.-Am., Coleoptera, Vol. 3, pt. 1: 135-137, 154-163.

ABSTRACT. The taxonomic and distributional status of 13 Central American species of the neotropical leaf-mining genus *Lius* is examined. Two of 15 names were found to be synonyms; and two species were found to occur only in South America, their names having been misapplied to Central American insects. Lectotype designations are made for seven species, and seven species described by Waterhouse under the generic name *Leiopleura* are transferred to *Lius*. One new name, *Lius waterhousei*, is proposed for a transferred species whose original name is preoccupied in *Lius*. -- Henry A. Hespeneheide, Biological Sciences Group, Box U-43, University of Connecticut, Storrs, CT 06268.

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